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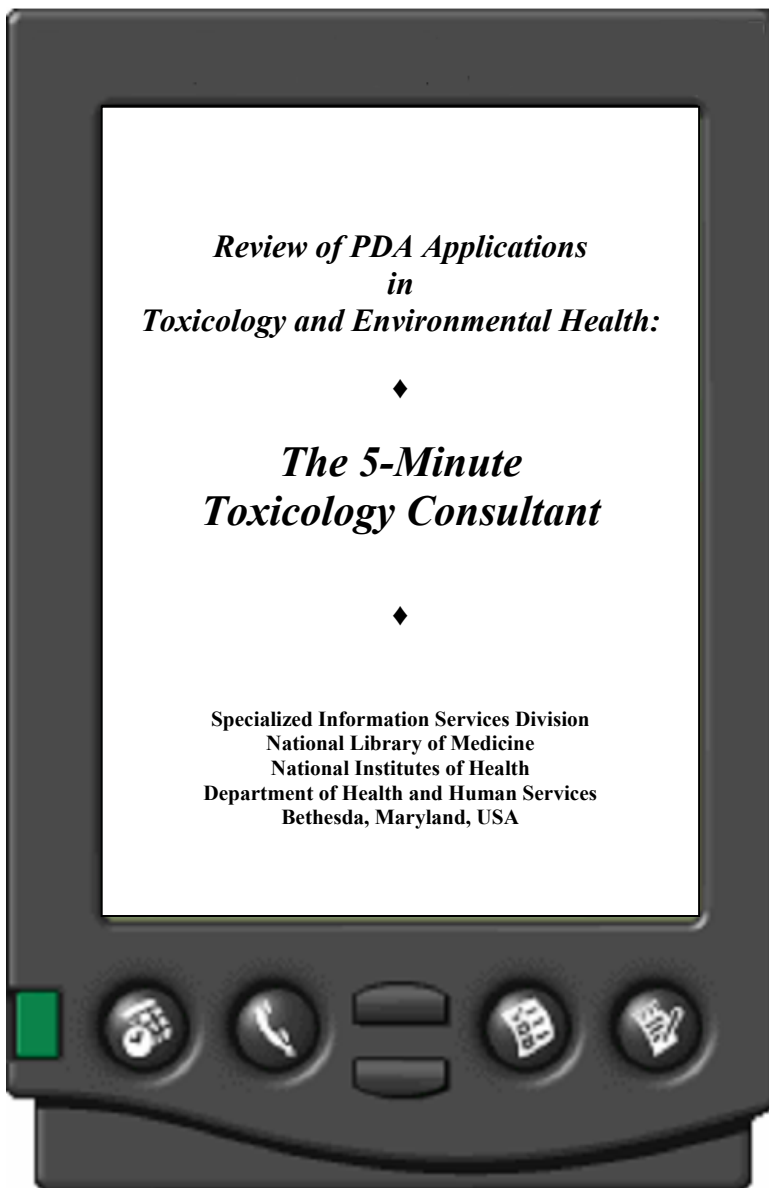
*Review of PDA Applications
in
Toxicology and Environmental Health:*



*The 5-Minute
Toxicology Consultant*



Specialized Information Services Division
National Library of Medicine
National Institutes of Health
Department of Health and Human Services
Bethesda, Maryland, USA



5mTox™

(Reviewed 2/2005)



General Information

For general comments regarding the *Review of PDA Applications in Toxicology and Environmental Health*, please see the [Overview](#).

The technical and content review of this PDA application – **5mTox™**, *The 5-Minute Toxicology Consult for PDA* – was based on downloadable trial software. 5mTox™ is the handheld version of *5-Minute Toxicology Consult*, a quick reference guide to assessing and treating poisoned patients. It covers the full range of chemicals, medications, natural compounds, animal encounters, and adverse interactions.

Platforms

- Palm Version 4.0.105
- Pocket PC Version 4.0.104

Intended Users

- Practitioners dealing with patients who may have been poisoned

Authorship/Data Source

5mTox™ is drawn from the book, *The 5 minute Toxicology Consult* published by Lippincott Williams & Wilkins. The book and 5mTox™ were written by Richard C. Dart, MD, PhD, Katherine M. Hurlbut, MD, Edwin K. Kuffner, MD and Luke Yip, MD. Skyscape, Inc. developed the PDA platform.

Contents

- General Approach to the Poisoned Patient
- Patient Presentations with Toxicologic Causes
- Antidotes
- Chemical and Biological Agents

Using the Software

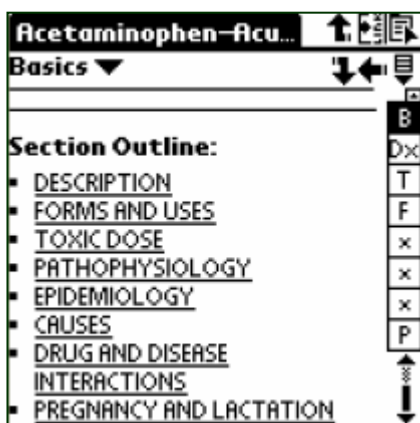


◀ This is opening screen for 5mTox™. You can tap on a word to find out more information about that topic. You can also type in a word in the space next to the words, “Look for...”.

For this session, acetaminophen will be used.

The diamond next to a word indicates that the word exists in several places in the database.

► Basics screen. This screen gives background facts on the topic, including standard use and dosage. You can retrieve more information by using the scroll bar at the bottom right of the screen.



◀ In addition to Description, the Basics category contains several other sections. The tool bar on the right side of the screen is made up of smARTabs™, quick links to the section who's title begins with the letter shown. smARTabs™ are available from within the body of a section, allowing the user to move around the program.



► Tapping the triangle next to *Basics* displays further options for exploring the substance in questions. Screen shots of the various sections are shown below. *Pitfalls* contain aspects of the poisoning of particular importance. *Miscellaneous* includes ICD -9-CM coding, *See Also* references, relevant journal citations, plus the author and reviewer of the specific information being read.

Acetaminophen-Acu...

Treatment ▼

[Show Section Outline]

- Treatment focuses on prevention of absorption, control of emesis, and administration of NAC within 8 hours of ingestion (as indicated by the Rumack-Matthew nomogram) if potentially toxic ingestion has occurred.
- Aggressive antiemetic therapy is important for patients with

B
Dx
T
F
x
x
x
P

Acetaminophen-Acu...

FollowUp ▼

[Show Section Outline]

PATIENT MONITORING

If the patient requires NAC treatment, PT or INR, AST, ALT, bilirubin, electrolytes, BUN, creatinine, and glucose should be repeated daily.

EXPECTED COURSE AND PROGNOSIS

Most patients who are treated

B
Dx
T
F
x
x
x
P

Acetaminophen-Acu...

Pitfalls ▼

DIAGNOSIS

Signs of poisoning may be minimal and overlooked during the first 24 hours.

TREATMENT

Failure to treat vomiting aggressively may result in substantial delays in NAC treatment and less favorable patient outcome.

B
Dx
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P

Acetaminophen-Acu...

Miscellaneous ▼

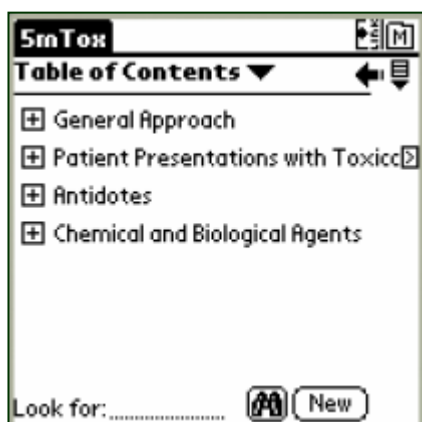
See Also: SECTION III, N-acetylcysteine chapter; and SECTION IV, Acetaminophen—Repeated (Chronic) Ingestion chapter.




RECOMMENDED READING

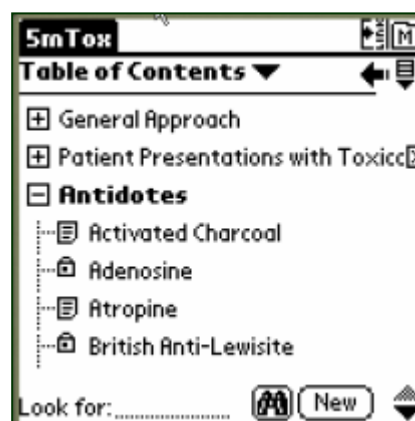
Keays R, Harrison P, Wendon, J, et al. Intravenous acetylcysteine in paracetamol induced fulminant hepatic failure: a prospective controlled trial. Br Med J

B
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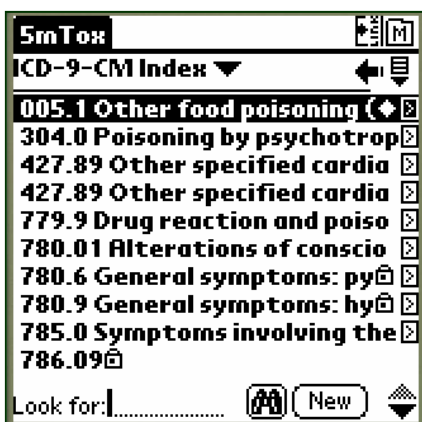
Using the Table of Contents



◀ The 5mTox™ Table of Contents guides users through the entire program. Clicking on the + sign expands that heading, as shown below. The  icon next to a listing signifies that information is available on that topic. The  icon means that the information is locked in the trial program and available in the full version.  expands the title.

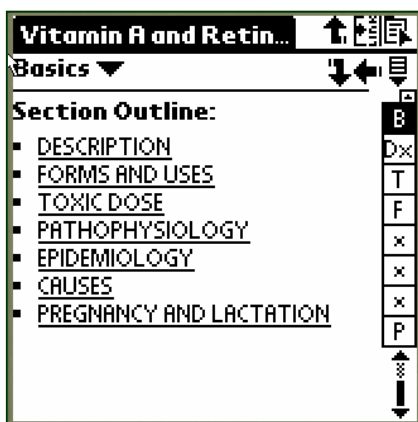


Using the ICD-9-CM Index



◀ This section provides searching by the International Classification of Disease, Clinical Modifications categories for poisoning, toxic effects, food poisoning, and cyanide.

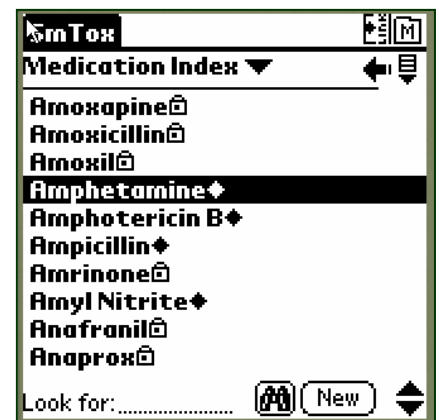
► *We're looking at the heading for vitamins.*



◀ *Our search leads us to the Basics screen we've seen before. This screen gives background facts on the topic, including standard use and dosage. You can retrieve more information by using the scroll bar at the bottom right of the screen. The subsequent navigation is the same as described in the Using the Software section.*

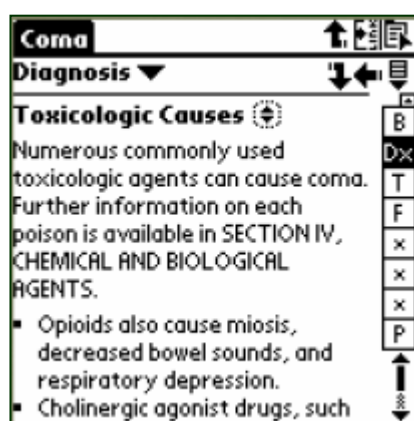
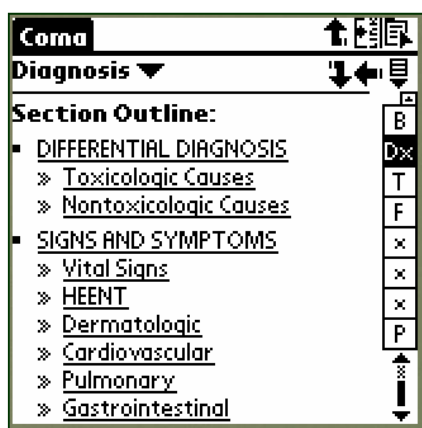
Using the Medication Index

► *Another access point is the Medication Index. You can either scroll through the alphabetic list or type in the desired medication name in the "Look for..." space.*





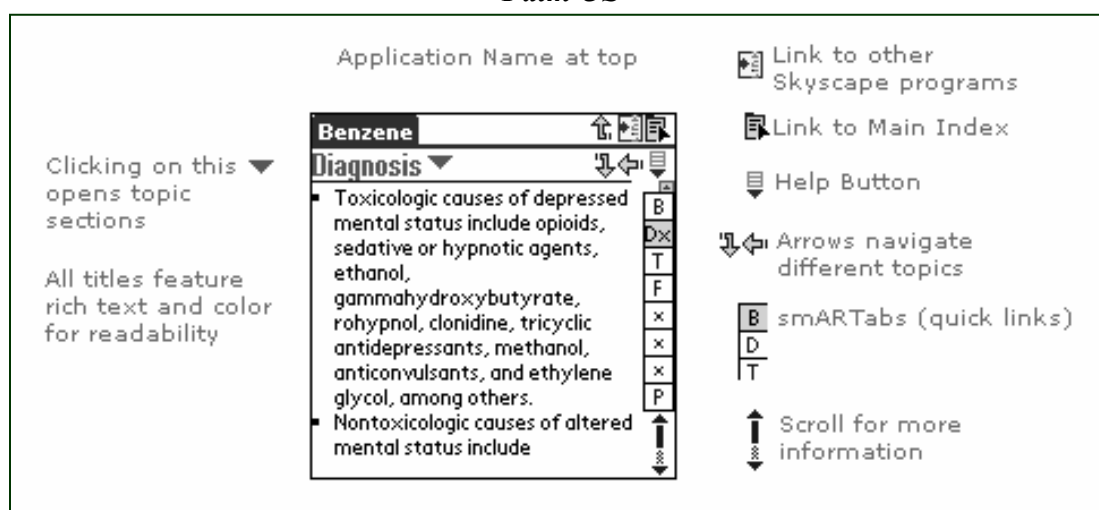
◀ Tapping on Amphetamine ♦ from the Medication index takes the user to a listing of everywhere that Amphetamine exists in the program. In our example, we'll select Coma. The information about Coma is shown in the screens below.



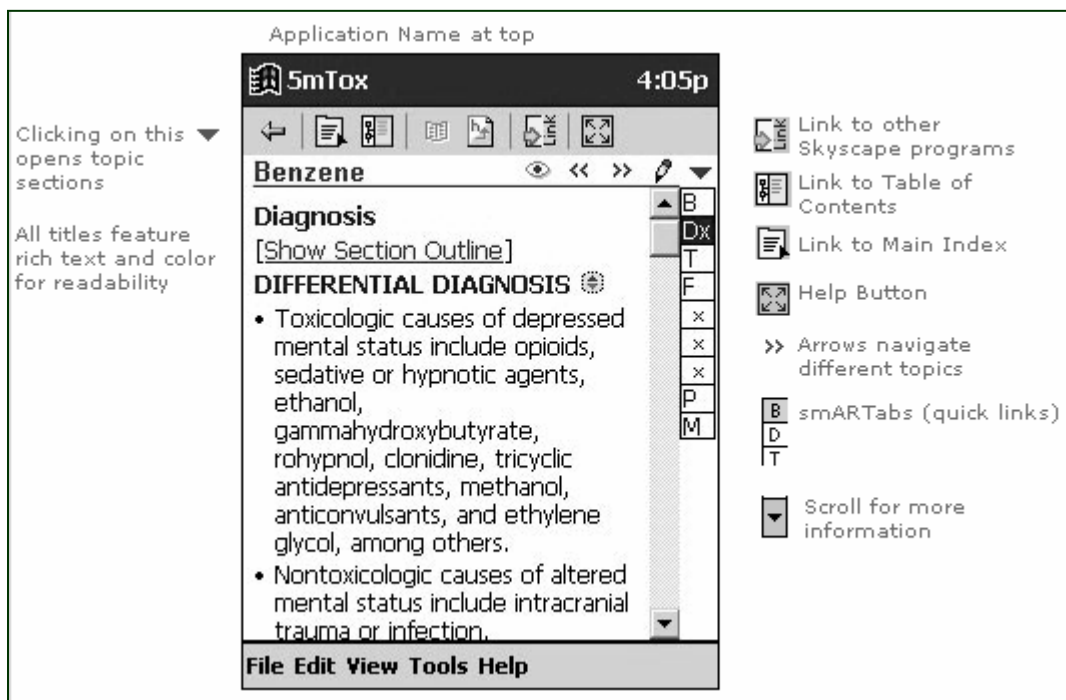
Navigation

Moving around the program is done by tapping on arrows or smARTabs™.

Palm OS



Pocket PC



Update Policy

Please visit the Skyscape Update page for more information,
http://www.skyscape.com/support/upgrading_faq.asp#upgrade_policy.

Peer Review Process

We were unable to find information about the peer review process.

Requirements

- Palm OS - 2.9 MB
- Pocket PC – 4.8 MB

Application Type/Price

- \$89.95

Availability

5mTox™ can be downloaded at Skyscape,
<http://www.skyscape.com/ESStore/ProductDetail.aspx?ProductID=271>. It is also available at Lippincott Williams & Wilkins, <http://www.lww.com/product/?0-7817-3883-0>.

Useful Web Links

Visit the Skyscape website at <http://www.skyscape.com> for more information about the company that produces the software.

For information about the Specialized Information Services division, visit <http://sis.nlm.nih.gov>.

Review of PDA Applications in Toxicology and Environmental Health

Overview

Handheld computer devices known as Personal Digital Assistants (PDAs) are increasingly being used in the fields of toxicology and environmental health. Moreover, software applications covering specialized subject matter in these fields are increasingly being made available to PDA users.

In an effort to provide information on the main technical and content features of selected applications, the National Library of Medicine's Division of Specialized Information Services (SIS) has undertaken an ongoing review of them. Typically, individual reports in the review series are based on free, downloadable demos.

Each report typically covers the following topics: General Information, Intended Users, Authorship/Data Source, Contents, Navigation, Requirements, Application Type/Price, Availability, Useful Web Links, and Updates.



Note: The *Review of PDA Applications in Toxicology and Environmental Health* is not intended to be all comprehensive, but rather a review of selected applications. SIS staff welcomes any comments on completed reviews or suggestions for additional reviews of applications not currently included, as long as they fall within the scope of toxicology and environmental health. You may contact us via email at tehip@tehl.nlm.nih.gov with any comments, questions, or suggestions.

It is not the intention of SIS staff to recommend, or not recommend, any particular PDA device(s) or software application(s), but rather to provide an objective and descriptive review of the main technical and content features of selected applications based on their downloadable demo versions.